HANNS·G

LCD Display

HW191

HSG1033

· User's manual

· Bedienungsanleitung

· Manuel de l'utilisateur

· Manuale dell'utente

· Manual de usuario

· Manual do utilizador

· Gebruikshandleiding

· Руководство пользователя

· Kullanıcı elkitabı

· Podręcznik użytkownika

· Uživatelská příručka

· Felhasználói útmutató

· Εγχειρίδιο χρήστη

· Manual de utilizare

· Priručnik za korisnike

· Керівництво користувача

· Ръководство на потребителя

· Brugervejledning

· Användarhandbok

· Bruksanvisning

· Käyttäjän ohjekirja

· ユーザーズマニュアル

· 使用手冊

· 使用手册

· 사용자 설명서

Before operating the monitor, please read this manual thoroughly. This manual should be retained for future reference.

FCC Class B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device complies with Parts 15 of the FCC Rule. Operation is subject to the following two conditions：(1) this device may not cause harmful interference；and (2) this device must accept any interference received, including interference that may cause undesired operations.

CANADA
This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.

CE

This device complies with requirement of EMC directive 89/336/EEC with regard to Electromagnetic Compatibility, and 73/23/EEC and 93/68/EEC with regard to Low Voltage directive.

Socket-outlet shall be near the equipment and shall be accessible.

Congratulations!

The display you have just purchased carries the TCO'03 Displays label. This means that your display is designed, manufactured and tested according to some of the strictest quality and environmental requirements in the world. This makes for a high performance product, designed with the user in focus that also minimizes the impact on our natural environment.

Some of the features of the TCO'03 Display requirements:

Ergonomics

- Good visual ergonomics and image quality in order to improve the working environment for the user and to reduce sight and strain problems. Important parameters are luminance, contrast, resolution, reflectance, colour rendition and image stability.

Energy

- Energy-saving mode after a certain time – beneficial both for the user and the environment
- Electrical safety

Emissions

- Electromagnetic fields
- Noise emissions

Ecology

- The product must be prepared for recycling and the manufacturer must have a certified environmental management system such as EMAS or ISO 14 001
- Restrictions on
  - chlorinated and brominated flame retardants and polymers
  - heavy metals such as cadmium, mercury and lead.

The requirements included in this label have been developed by TCO Development in cooperation with scientists, experts, users as well as manufacturers all over the world. Since the end of the 1980s TCO has been involved in influencing the development of IT equipment in a more user-friendly direction. Our labelling system started with displays in 1992 and is now requested by users and IT-manufacturers all over the world.

For more information, please visit
www.tcodevelopment.com

RECYCLING INFORMATION

We, the **Hanns.G** care very much about our environment protection strategy and firmly believe that it helps us have healthier earth via appropriate treatment and recycling of industrial technology devices at the end-of-life.
These devices contain recyclable materials, which can be re-decomposed and re-integrated into brand-new marvels. On the contrary, other material can be classified to hazardous and poisoned substances. We strongly encourage you to contact the provided information to recycle this product.

For more information, please visit
www.hannsg.com

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SAFETY NOTICE

1. The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
2. Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.
3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. It is the responsibilities of the user to correct such interference.

WARNING:
To prevent fire or shock hazard, do not expose the monitor to rain or moisture. Dangerously high voltages are present inside the monitor. Do not open the cabinet. Refer servicing to qualified personnel only.

PRECAUTIONS

- Do not use the monitor near water, e.g. near a bathtub, washbowl, kitchen sink, laundry tub, swimming pool or in a wet basement.
- Do not place the monitor on an unstable cart, stand, or table. If the monitor falls, it can injure a person and cause serious damage to the appliance. Use only a cart or stand recommended by the manufacturer or sold with the monitor. If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of the monitor and to protect it from overheating, be sure these openings are not blocked or covered. Do not place the monitor on a bed, sofa, rug, or similar surface. Do not place the monitor near or over a radiator or heat register. Do not place the monitor in a bookcase or cabinet unless proper ventilation is provided.
- The monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- Unplug the unit during a lighting storm or when it will not be used for long period of time. This will protect the monitor from damage due to power surges.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Never push any object into the slot on the monitor cabinet. It could short circuit parts causing a fire or electric shock. Never spill liquids on the monitor.
- Do not attempt to service the monitor by yourself; opening or removing covers can expose you to dangerous voltages and other hazards. Please refer all servicing to qualified service personnel.
- The wall socket shall be installed near the equipment and shall be easily accessible.

SPECIAL NOTES ON LCD MONITORS

The following symptoms are normal with LCD monitor and do not indicate a problem.

- Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- The LCD screen has effective pixels of 99.99% or more. It may include blemishes of 0.01% or less such as a missing pixel or a pixel lit all of the time.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image, when the same image is displayed for hours. In this case, the screen is recovered slowly by changing the image or turning off the Power Switch for hours.
- If the screen suddenly flashes erratically or the backlighting fails, please contact your dealer or service center for repair. Do not attempt to repair the monitor yourself.

Lamp Disposal

LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS. FOR MORE INFORMATION, CONTACT THE ELECTRONIC INDUSTRIES ALLIANCE AT WWW.EIAE.ORG. FOR LAMP SPECIFIC DISPOSAL INFORMATION CHECK TTTTWWW.LAMPRECYCLE.ORG.

BEFORE OPERATING THE MONITOR

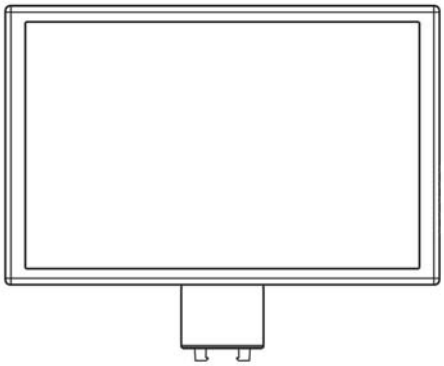
FEATURES

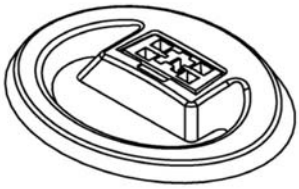
- 19" Wide screen TFT Color LCD Monitor
- Crisp, Clear Display for Windows
- Recommended Resolutions*: 1440 X 900@60Hz*
- EPA ENERGY STAR®
- Ergonomic Design
- Space Saving, Compact Case Design

CHECKING THE CONTENTS OF THE PACKAGE

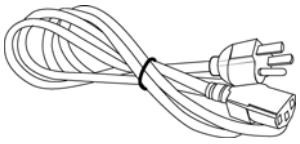
The product package should include the following items:

LCD Monitor

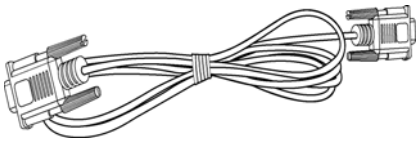




Cables and User manual

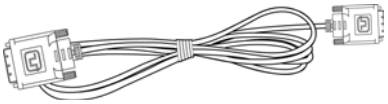


Power Cord

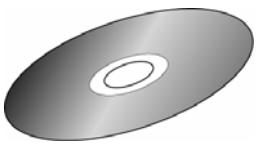


VGA Cable

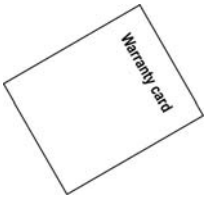
Audio Cable



DVI-D Cable (Optional)



User's manual



Warranty card

INSTALLATION INSTRUCTIONS

Install **Remove**

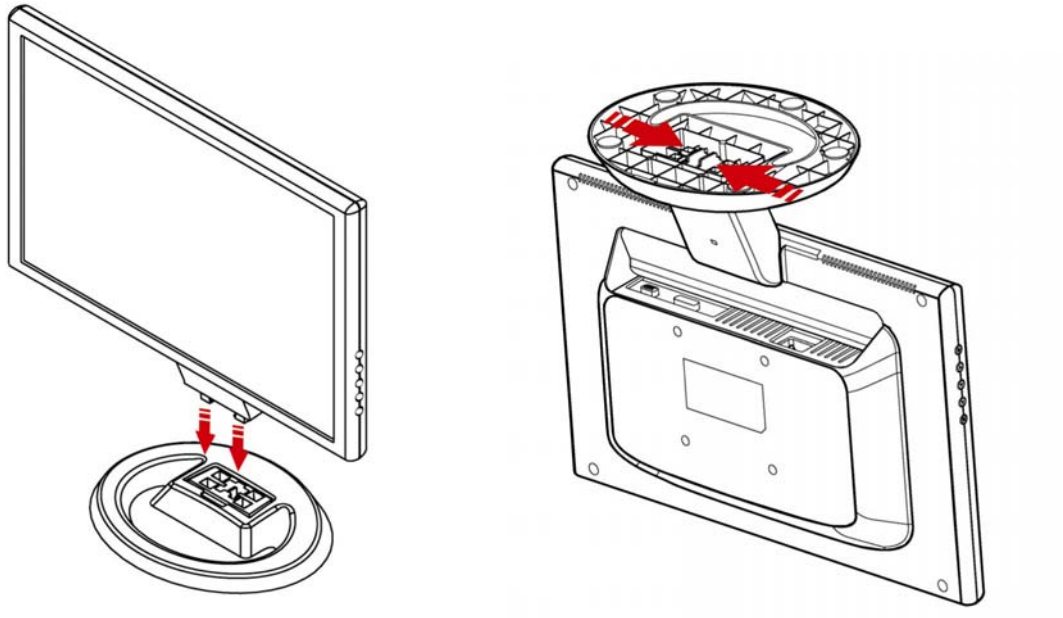


Figure.1. Installing and Removing the Base

INSTALLATION:

1. Align the monitor with the opening in the base.
2. Note that the longer section of the base points forward.
3. Snap the monitor into its base. A clear click sound will affirm that the base is connected correctly.
4. Verify that the monitor is securely attached to the base by looking at the bottom of the base and making sure that the clips are fully engaged in the base.

REMOVAL:

1. Flip over the monitor so that it is upside down.
2. Press the 2 clips on the base that holds the monitor in place.
3. Gently press and hold the 2 clips while pulling the base from the monitor unit they are unattached.

POWER

POWER SOURCE:

1. Make sure that the power cord is the correct type required in your area.
2. This LCD monitor has an Internal universal power supply that allows operation with either 100/120V AC or 220/240V AC voltage areas (No user adjustment is required.)
3. Connect one end of the AC-power cord to your LCD monitor's AC-input socket, and the other end to the wall-outlet.

MAKING CONNECTIONS

CONNECTING TO A PC

Turn off your computer before performing the procedure below.

1. Connect one end of the VGA cable to the back of the monitor and connect the other end to the computer's D-Sub port.
2. Connect one end of the DVI-D cable (Dual input mode optional) to the back of the monitor and connect the other end to the computer's DVI-D port.
3. Connect the audio cable between the monitor's audio input and the PC's audio output (green port).
4. Plug one end of the AC power cord to the LCD monitor's AC input socket, and the other end to the Wall outlet.
5. Turn on your monitor and computer.

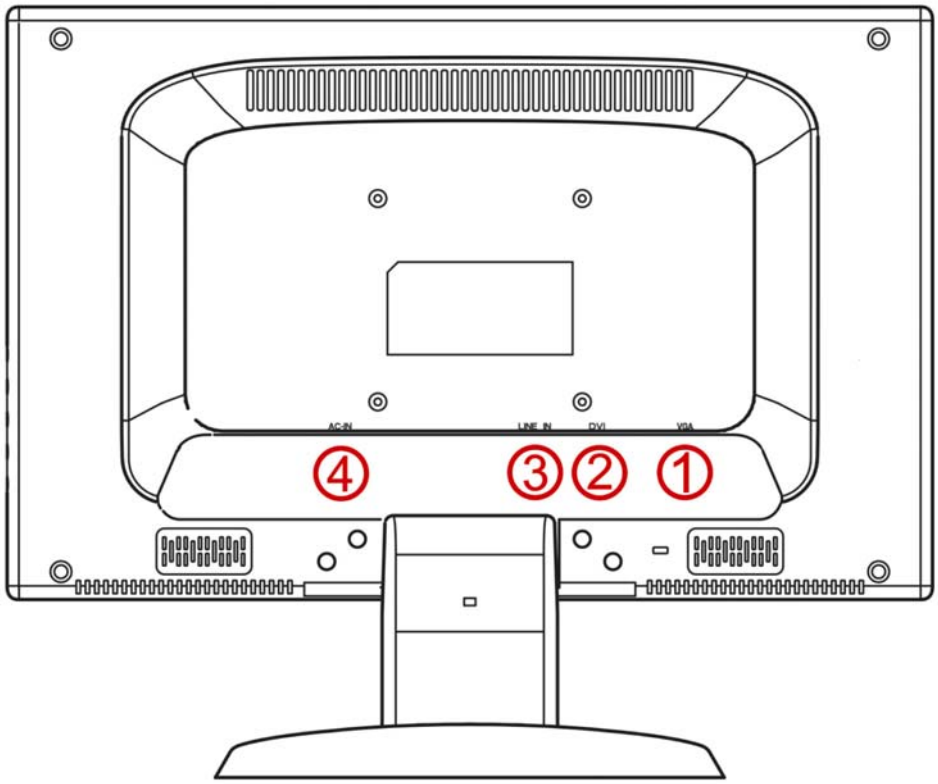


Figure.2. Connecting to a PC

1.	VGA Input	2.	DVI-D Input (optional)
3.	Audio Input	4.	Power AC Input

ADJUSTING THE VIEWING ANGLE

- For optimal viewing it is recommended to look at the full face of the monitor, and then adjust the monitor's angle to your own preference.
- Hold the stand so you do not topple the monitor when you change the monitor's angle.
- The monitor's angle is adjustable from 0° to 20°.

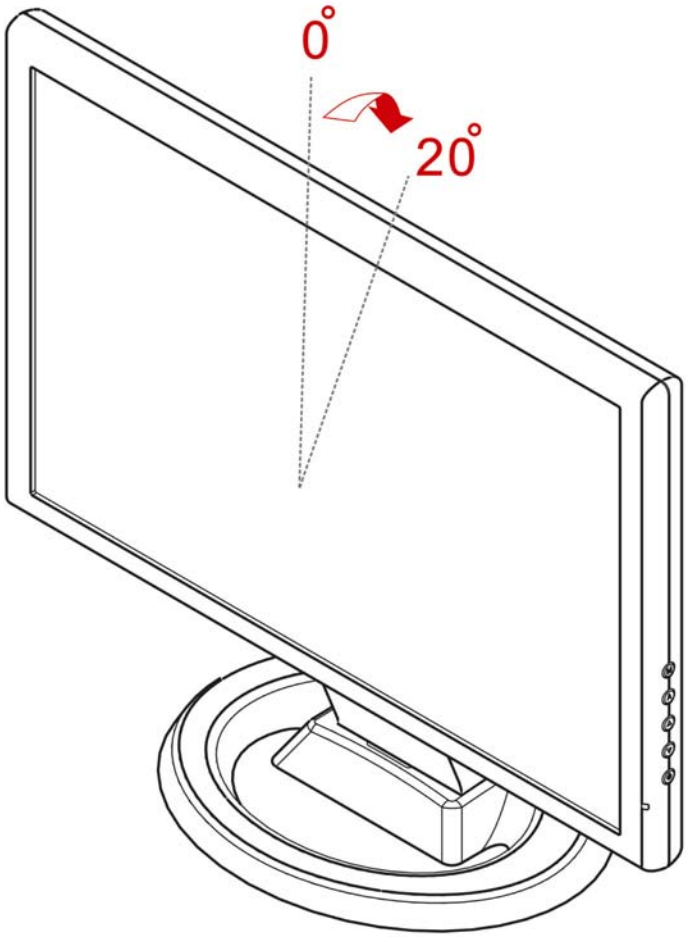


Figure.3. Monitor Angle

NOTES:

- Do not touch the LCD screen when you change the angle. It may cause damage or break the LCD screen.
- Be careful not to place fingers or hands near the hinges when tilting the monitor, otherwise pinching can result.

OPERATING INSTRUCTIONS

GENERAL INSTRUCTIONS

Press the power button to turn the monitor on or off. The other control buttons are located on the front panel of the monitor (See Figure 4). By changing these settings, the picture can be adjusted to your personal preference.

- The power cord should be connected.
- Connect the Signal cable from the monitor to the VGA card.
- Press the power button to turn on the monitor. The power indicator will light up.

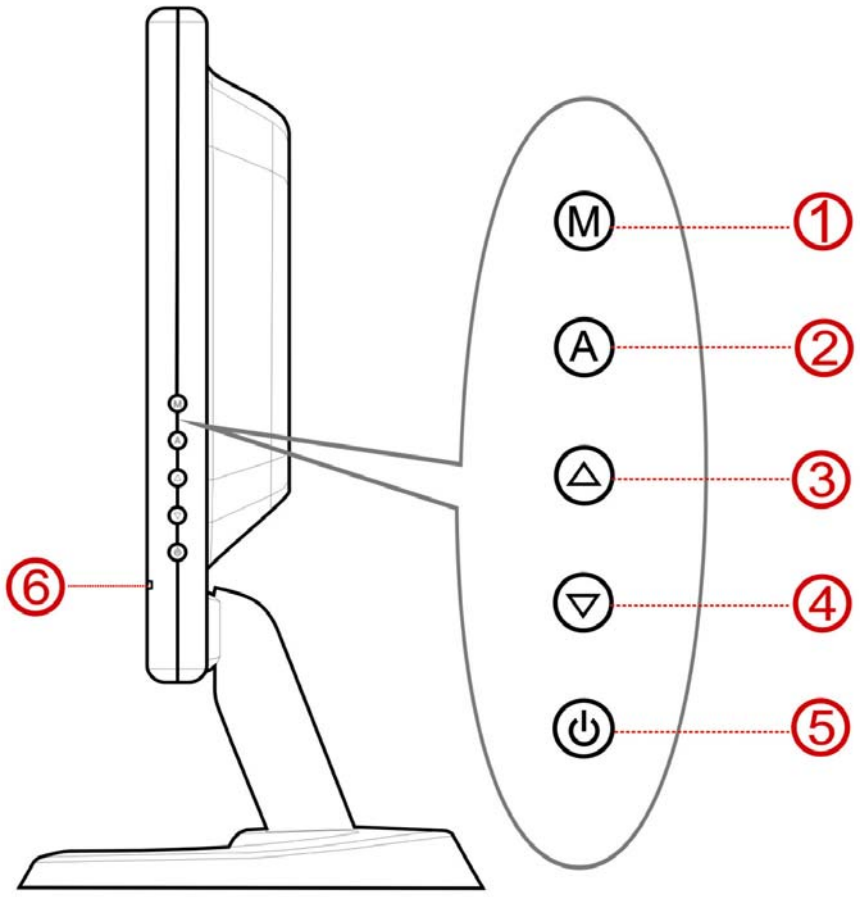


Figure.4. Control Panel Buttons

CONTROL PANEL BUTTONS:

1.	Menu / Return	2.	Auto adjustment /Input source change / Enter
3.	Brightness adjustment button /▲ [+]	4.	Volume adjustment button / ▼ [-]
5.	Power Button	6.	Power Indicator

FRONT PANEL CONTROL

- **Power Button:**
  Press this button to switch ON/OFF monitor's power.

- **Power Indicator:**
  Green — Power On mode.
  Orange — Power Saving mode.

- **MENU / RETURN:**
  1. Turn the OSD menu on/off or return to the previous menu.
  2. Exit OSD menu when in volume OSD status.

- **Adjust ▲▼:**
  1. Adjust Brightness and volume when the OSD is off.
  2. Navigate through adjustment icons when OSD is ON or adjust a function when function is activated.

- **A Button:**
  HW191A:
  1. The OSD menu is used as "confirmation" function during start-up.
  2. The 「Auto adjustment」 function works only for VGA input. (The auto adjustment function is used to optimize the 「horizontal position」, 「vertical position」,「clock」,and 「phase」.)

  HW191D:
  1. Press the A button to select the input signal type. (There are VGA,DVI options available but what port you can actually select depends on your model.)
  2. The OSD menu is used as "confirmation" function during start-up.
  3. Press and hold this button more than 3 seconds will start 「Auto Adjust」 function when using VGA input only. (The auto adjustment function is used to optimize the 「horizontal position」, 「vertical position」,「clock」,and 「phase」.)

NOTES:

- Do not install the monitor in a location near heat sources such as radiators or air dusts, or in a place subject to direct sunlight, or excessive dust or mechanical vibration or shock.
- Save the original shipping box and packing materials, as they will come in handy if you ever have to ship your monitor.
- For maximum protection, repackage your monitor as it was originally packed at the factory.
- To keep the monitor looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner, benzene, or abrasive cleaners, since these will damage the cabinet. As a safety precaution, always unplug the monitor before cleaning it.

HOW TO ADJUST A SETTINGS

BRIGHTNESS/CONTRAST	
BRIGHTNESS	Adjust the brightness value of the display according to your preference. Select「BRIGHTNESS」option to adjust the brightness value.
CONTRAST	Adjust the contrast value of the display according to your preference. Select「CONTRAST」option to adjust the contrast value.
X-CONTRAST	Optimal setting for high contrast images or videos. The dark and light areas of the image are automatically detected, and the contrast is enhanced to provide a clearer, sharper image. Also, you may select the「X-CONTRAST」option.
INPUT SETTING	
INPUT SETTING	Select the「INPUT SETTING」option to change between analog (VGA) or Digital (DVI) source. Enter the option and select Analog or Digital. [Dual input mode optional]
AUTO SEARCH	From the Signal Selection menu, select the 「AUTO SEARCH」option to activate or deactivate the automatic signal search function. [For DVI/ HDMI Input only]
COLOR SETTING	
WARM NATURE COOL	Adjust the color temperature value of the display according to your preference: WARM /NATURE/ COOL.
USER	Move the cursor to the User option and select it, To adjust the red, enter the「R」option and adjust the level. To adjust the green, enter the「G」option and adjust the level. To adjust the blue, enter the「B」option and adjust the level.
IMAGE SETTING	
AUTO ADJUST	The auto adjustment function is used to optimize the「horizontal position」,「vertical position」,「clock」,and 「phase」. [For VGA Input only]
ASPECT RATIO	When the aspect ratio of screen is distorted, you may make adjustments by using this function. "FULL" indicates full screen display, which does not ensure the image is shown as is or in initial scale. "FIT" indicates scaling by the proportion of original images, which may cause the screen showing black bands. [The availability of this function depends upon the selected model]

H-POSITION	Select the「H-POSITION」option to shift the screen image to the left or right. Enter the option and adjust the level. [For VGA only]
V-POSITION	Select the「V-POSITION」option to shift the screen image up or down. Enter the option and adjust the level. [For VGA only]
CLOCK	Select the 「CLOCK」option to reduce the vertical flicker of characters on the screen. Enter the option and adjust the level. [For VGA only]
PHASE	Select the「PHASE」option to reduce the horizontal flicker of characters on the screen. Enter the option and adjust the level. [For VGA only]
SHARPNESS	Select the「SHARPNESS」option to adjust the sharpness of the display. Set the value from -2 to 2.
HDMI MODE	Transferring audio-video image by HDMI port would cause edges of the image being cut on the screen; select「PC Mode」to display in full screen. Enter the option and select 「VIDEO Mode」(VIDEO) or 「PC Mode」(PC). [For HDMI Input only]
RESPONSE TIME	Setup the display response time through the Response time function. Available settings are **MINIMUM, INTERMEDIATE**, and **MAXIMUM**. [This feature is limited to specific models only.]
OSD SETTING	
LANGUAGE	Select 「LANGUAGE」 option to change the language of the OSD. Enter the option and select a language. [Reference only, the OSD Language depends on the selected model]
H-POSITION	Select「H-POSITION」option to adjust the horizontal position of the OSD. Enter the option and adjust the level.
V-POSITION	Select 「V-POSITION」option to adjust the vertical position of the OSD. Enter the option and adjust the level.
TRANSPARENCY	Select「TRANSPARENCY」option to adjust the transparency of the OSD. Enter the option and adjust the level.
OSD TIME-OUT	Select 「OSD TIME-OUT」option to set the OSD time out from 10 to 100 seconds. Enter the option and adjust the level.
OSD COLOR	To choose the color combination of the OSD window, select

	「OSD COLOR」option under 「OSD SETTING」menu, choose modes 1/2/3.
SYSTEM	
AUDIO INPUT	While transferring via the HDMI port, it is recommended to set AUDIO INPUT to HDMI; if no sound is outputted, it is recommended to select AUDIO INPUT as PC, and make sure the PC audio output cable is connected to monitor's LINE IN (or AUDIO IN) port. [For HDMI Input only]
VOLUME	Select the 「VOLUME」option to change the volume level. Enter the option and adjust the level. [By high volume, risk of hearing damage exists]
MUTE	Select the 「MUTE」 option to switch the function On or Off.
DDC/CI	Select the 「DDC/CI」 option to switch the function On or Off. [Dual input mode optional]
FACTORY RESET	Select the 「FACTORY RESET」option to reset to the monitor's default setting. This will erase the current settings. Enter the option and select On or Off.
INFORMATION	Display Horizontal frequency/Vertical frequency/Resolution information.

PLUG AND PLAY

Plug & Play DDC2B Feature

This monitor is equipped with VESA DDC2B capabilities according to the VESA DDC STANDARD. It allows the monitor to inform the host system of its identity and, depending on the level of DDC used, communicate additional information about its display capabilities. The DDC2B is a bidirectional data channel based on the I²C protocol. The host can request EDID information over the DDC2B channel.

THIS MONITOR WILL APPEAR TO BE NON-FUNCTIONAL IF THERE IS NO VIDEO INPUT SIGNAL. IN ORDER FOR THIS MONITOR TO OPERATE PROPERLY, THERE MUST BE A VIDEO INPUT SIGNAL.

This monitor meets the Green monitor standards as set by the Video Electronics Standards Association (VESA) and/or the United States Environmental Protection Agency (EPA) and The Swedish Confederation Employees (NUTEK). This feature is designed to conserve electrical energy by reducing power consumption when there is no video-input signal present. When there is no video input signal this monitor, following a time-out period, will automatically switch to power saving mode. This reduces the monitor's internal power supply consumption. After the video input signal is restored, full power is restored and the display is automatically redrawn. The appearance is similar to a "Screen Saver" feature except the display is completely off. The display is restored by pressing a key on the keyboard, or clicking the mouse.

TECHNICAL SUPPORT (FAQ)

Q & A FOR GENERAL PROBLEMS

PROBLEM & QUESTION	POSSIBLE SOLUTION
Power LED is not on	*Check if the Power Switch is in the ON position. *Power Cord should be connected.
No Plug & Play	*Check if the PC system is Plug & Play compatible. *Check if the Video Card is Plug & Play compatible. *Check if any plug pins on the VGA or DVI connector are bent.
The display is too dark or too bright.	*Adjust the Contrast and Brightness Controls.
Picture bounces or a wave pattern is present in the picture	*Move electrical devices that may cause electrical interference.
The power LED is ON (orange) but there's no video or no picture.	*Computer Power Switch should be in the ON position. *Computer Video Card should be snugly seated in its slot. *Make sure monitor's video cable is properly connected to the computer. *Inspect monitor's video cable and make sure none of the pins are bent. *Make sure computer is operational by hitting the CAPS LOCK key on the keyboard while observing the CAPS LOCK LED. The LED should either turn ON or OFF after hitting the CAPS LOCK key.
Missing one of the primary colors (RED, GREEN, or BLUE)	*Inspect the monitor's video cable and make sure that none of the pins are bent.
Screen image is not centered or sized properly.	* Adjust pixel frequency CLOCK and PHASE or press hot-key (**A** Button)
Picture has color defects (white does not look white)	*Adjust RGB color or select color temperature.
The screen resolution needs to be adjusted	*Use win 2000/ME/XP Right click anywhere on desktop and select **Properties**>**Settings**>**Screen Resolution**. Use the silder to adjust the reslution and click **Apply.**
No sound is outputted from monitor's built-in speaker	*Make sure PC audio output cable is connected to screen' s LINE IN port (or AUDIO IN port). *Make sure the sound volume adjustment can be clearly identified. *Make sure the **System** > **Silence** option in the monitor menu is on. *While transferring via HDMI port but no sound is outputted, it is recommended to select AUDIO INPUT as a PC option,

	and make sure PC audio output cable is connected to monitor' s LINE IN port(or AUDIO IN port). [For HDMI Input only]

ERROR MESSAGE & POSSIBLE SOLUTIONS

- **CABLE NOT CONNECTED:**
  1. Check that the signal-cable is properly connected, If the connector is loose, tighten the connector's screws.
  2. Check the signal-cable's connection pins for damage.

- **INPUT NOT SUPPORT:**
  Your computer has been set to unsuitable display mode, set the computer to display mode given in the following table.

FACTORY PRESET TIMING TABLE:

MODE	RESOLUTION	HORIZONTAL FREQUENCY (KHz)	VERTICAL FREQUENCY (Hz)
1	640×350 @70Hz VGA	31.469	70.087
2	640×400 @56Hz PC9801	24.827	56.424
3	640×400@70HzVGATEXT	31.469	70.087
4	640×480 @60Hz VGA	31.469	59.94
5	640×480 @67Hz MAC	35	66.667
6	640×480 @70Hz VGA	36.052	70.004
7	640×480 @72Hz VGA	37.861	72.809
8	640×480 @75Hz VGA	37.5	75
9	720×400@70HzVGATEXT	31.469	70.087
10	720x480@60Hz VGA	31.469	59.94
11	800×600 @56Hz SVGA	35.156	56.25
12	800×600 @60Hz SVGA	37.879	60.317
13	800×600 @72Hz SVGA	48.077	72.188
14	800×600 @75Hz SVGA	46.875	75
15	832×624 @74.6Hz MAC	49.725	74.5
16	1024×768 @60Hz XGA	48.363	60.004
17	1024×768 @66Hz XGA	53.964	66.132
18	1024×768 @70Hz XGA	56.476	70.069
19	1024×768 @75Hz XGA	60.023	75.029
20	1024×768 @75Hz MAC	60.15	74.72
21	1152×864 @75Hz SXGA	67.5	75
22	1152×870 @75Hz MAC	68.681	75.062
23	1152×900 @66Hz SUN66	61.846	66.004
24	1280×720 @60Hz	45	60
25	1280×768 @60Hz	47.396	59.995
26	1280×768 @75Hz	60.289	74.893
27	1280×960 @60Hz	60	60
28	1280×960 @75Hz	74.592	74.443

29	1280×1024 @60Hz SXGA	63.981	60.02
30	1280×1024 @72Hz SXGA	76.02	71.448
31	1280×1024 @75Hz SXGA	79.976	75.025
32	1360×768 @60Hz SXGA	47.712	60.015
33	1400×1050@60Hz WXGA +	64.744	59.948
34	1400×1050@60Hz WXGA +	65.317	59.978
35	1440×900 @60Hz SXGA	55.469	59.901
36	1440×900 @60Hz SXGA	55.935	59.887
37	1440×900 @75Hz SXGA	70.635	74.984

APPENDIX

SPECIFICATIONS

LCD Panel	Driving system	TFT Color LCD
	Size	19"
	Pixel pitch	0.285mm(H) x 0.285mm(V)
Video	H-Frequency	24.8KHz – 82KHz
	V-Frequency	56Hz– 76Hz
Display Colors		16.7M Colors
Max. Resolution		1440 x 900 @75Hz
Plug & Play		VESA DDC2B™
EPA ENERGY STAR®	ON Mode	≤42W
	Power Saving Mode	≤2W
	OFF Mode	≤1W
Audio output		Rated Power 2.0W rms (Per channel)
Input Terminal		VGA DVI-D (Dual_input Model)
Maximum Screen Size		Hor. : 410.4 mm Ver. : 256.5 mm
Power Source		100~240VAC±10%,50±3Hz,60±3Hz
Environmental Considerations		Operating Temp: 0° to 40°C Storage Temp.: -20° to 55°C Operating Humidity: 10% to 80%
Dimensions		453(W)×380(H)×199(D) mm 17.83"(W)×14.6"(H)×7.8"(D)
Weight (NW)		3.6kg (7.9 lb)

***The above specification is subject to actual product specification and is subject to change without prior notice.

NOTES:
The Maximum Resolution will depends on the display card supporting. Related issue can refer to www.hannsg.com FAQ section.